

AUTOMATED CREDIT APPLICATION SYSTEM

Cross Reference To Related Patent Application

5 5/6 > This application is related to co-pending application serial number 08/526,776, filed September 12, 1995, entitled "COMPUTER IMPLEMENTED AUTOMATED CREDIT APPLICATION ANALYSIS AND DECISION ROUTING SYSTEM" the subject matter of which is hereby incorporated by reference in its entirety. Further, this application is related to a number of co-pending design patent applications for the ornamental design of the computer icons used in the system described herein.

Background Of The Invention

1. Field of The Invention

The invention relates to the technical field of data processing, and more particularly to an enhanced computer implemented credit application analysis and decision routing system.

2. Background Information

Before the invention of the subject matter of the above-referenced related co-pending application, obtaining credit and financing of a major consumer purchase had been done manually. Typically, an applicant filled out a credit (loan) application by hand. The process is fully described in the co-pending application, and therefore will not be repeated here.

Certain aspects of the prior loan application process had been automated to a limited extent, for example, according to Jones et al. (U.S. Patent No. 5,239,462) and Dykstra et al. (U.S. Patent No. 5,611,052). However, these disclosed systems have somewhat limited functionality in processing loan applications.

The related co-pending application describes a comprehensive automation of the whole credit application process to provide flexibility and functionality in the management of the credit application process. Additional functionality, improvements to the system functionality described in the co-pending application, and aspects of the

invention previously fully disclosed but for which additional protection is desired, are therefore the subject of this application.

Objects of the Invention

5 It is a principal object of the present invention to provide an enhanced on-line, real time, solution for the entire indirect loan application processing, routing and funding, for use in automotive sales, for example.

10 It is a further object of the invention to provide an interface with a third party vendor which allows a credit originator to fax an application to the third party vendor for entry into the loan processing system.

15 It is a further object of the invention to provide super store front end kiosk integration with the loan processing system. Kiosks are used at super stores such as CarMax and DriversMart, for example, and will permit a consumer to fill out an application for credit which will be routed to the central host of the system according to the present invention.

It is a further object of the invention to provide for a lender-to-lender capability, in which an application can be automatically forwarded through the system by a first lender to a second lender with which the first lender has a relationship, if, for example, the first lender has decided not to approve the loan application.

20 It is a further object of the invention to provide a lender user interface for decisioning in which a lender can receive an application directly through the loan processing system of the invention, view the application on a separate display device, and manually decision the application or manually enter the application into the lender's own credit processing system.

25 It is a further object of the invention to provide contract validation functionality in which, after loan application approval, a sales contract can be forwarded through the system from a dealer to a lender for numerical (and other) verification prior to funding the loan. Further, if agreed with the lender, the lender can be set up to trigger an automatic disbursement of funds to the dealer account when the contract is approved.

30 It is a further object of the invention to provide windows based system, enabling a full-color graphical user interface (GUI) in which various icons are used to represent

and initiate operations, and wherein color high-lighting indicating important or critical information can be used, and wherein various images can be displayed, for example.

It is a further object of the invention in connection with the GUI, to implement enhanced mega-dealer reporting in which dealers that have multiple dealerships can aggregate data from all of their dealerships into consolidated reports.

It is a further object of the invention to provide an interface with dealer web sites for the exchange of data, the interfacing providing a link between the dealer web site and the credit application routing system central host, and therefore, to the rest of the system to provide for loan processing and routing, for example.

It is a further object of the invention in connection with the dealer web site features, to provide for a "leads" functionality in which information about visitors to a dealer's web site is provided to the dealer.

It is a further object of the invention to provide an interface with in-house systems, such as the ADP Elite software package, or one from U. C .S., for example, so that dealers using such a system can benefit from practically seamless integration of their system with the rest of the loan processing system of the present invention.

It is a further object of the invention in connection with the GUI, to provide an enhanced debt ratio functionality in which what-if scenarios can be explored to find a suitable financing arrangement for a consumer.

It is a further object of the invention in connection with the windows-based (GUI) features, to provide for automatic version (level) checking and updating of the resident software each time a user, e.g., a dealer, connects to the system.

It is a further object of the invention to provide an enhanced gateway CPU at a lender's site, which communicates with the system host, and on which program software of the present invention resides.

The manner of achieving these and other objects of the invention will be clear from this disclosure to one skilled in the art.

Summary Of The Invention

In accordance with the above objects, the present invention provides an enhanced credit application entry and routing system. The following features and

advantages are achieved according to the embodiments of the invention which are herein disclosed and claimed.

According to an aspect of the invention, the fax connection provides the advantageous capability to route applications from a third party data entry source through the system to lenders. Dealers can have the third party vendor enter the application data thereby eliminating any need for the dealer to have data entry equipment and/or personnel for entering loan application data into the loan processing and routing system. By having this additional pipeline from the third party vendor to the system, lenders are able to receive electronically applications from multiple sources from whom they might otherwise have to deal with manually. In this regard, disclosed is a method of operating a credit application and routing system, the system including a central processor coupled to a communications medium for communicating with remote application entry and display devices at an application staging facility having fax devices, remote display devices at point of sale locations, remote credit bureau terminal devices, and remote funding source terminal devices, the method comprising receiving a facsimile credit application from a point of sale location at an application staging facility by fax, entering credit application data from the facsimile credit application into a remote application entry and display device, selectively receiving at the central processor the credit application data from the remote application entry and display device, selectively (optionally) obtaining associated credit report data from at least one remote credit bureau terminal device, selectively forwarding the credit application data (and optionally, credit report data) to at least one remote funding source terminal device, and selectively forwarding funding decision data from the at least one remote funding source terminal device to a display device at the respective point of sale location. The remote display devices at the point of sales locations may be fax machines or CRT display devices, for example.

According to another aspect of the invention, the integration of the loan processing and routing system with remote point of sale consumer credit application kiosks, and the like, advantageously allows a consumer to enter an application at a "Super Store" or other location with kiosks, and have the application transmitted electronically to the application processing system host. In this regard, disclosed is a

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computer based method of operating a credit application and routing system, the system including a central processor coupled to a communications medium for communicating with remote application entry and display devices, the entry and display devices including consumer credit application kiosks, remote credit bureau terminal devices, and remote funding source terminal devices, the method comprising selectively receiving credit application data from a consumer credit application kiosk, (optionally) selectively obtaining credit report data from at least one remote credit bureau terminal device, selectively forwarding the credit application data (and optional credit report data) to at least one remote funding source terminal device, and selectively forwarding funding decision data from the at least one remote funding source terminal device to the respective consumer credit application kiosk. The kiosks may be operating site specific information gathering software.

According to another aspect of the invention, a lender-to-lender functionality is available which advantageously provides that, if an initial lender decides not to approve an application, the initial lender can opt to automatically forward the application through the system to another lender, a "secondary lender," with whom the initial lender has a relationship. In other words, the initial lender has an option other than just to send the application directly back to the dealer unapproved. (In the prior system according to the co-pending application, the application could then have been sent to another lender independently of the initial lender, if specified by the dealer.) Upon the secondary lender issuing a decision, both lender responses are then sent back to the dealer. This entire process advantageously takes place in a matter of typically a few minutes, for example. The lender-to-lender capability provides readily apparent advantages to each of the parties involved, the applicant, the dealer and the lenders, initial and secondary.

In this regard, disclosed is a computer based method of operating a credit application and routing system, the system including a central processor coupled to a communications medium for communicating with remote application entry and display devices, remote credit bureau terminal devices, and remote funding source terminal devices, the method comprising selectively receiving credit application data from a remote application entry and display device, selectively obtaining credit report data from at least one remote credit bureau terminal device, selectively forwarding the credit

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application data, and credit report data if appropriate, to a first remote funding source terminal device, selectively forwarding the credit application data, and credit report data if appropriate, to a second remote funding source terminal device if the funding source associated with the first remote funding source terminal device declines to approve the credit application, and selectively forwarding funding decision data from the first and second remote funding source terminal devices to the respective remote application entry and display device.

According to another aspect of the invention, the lender user interface (LUI) advantageously provides lenders with the capability of manually responding to dealer requests (e.g., loan applications) received electronically over the inventive system. With the LUI, the lender can view on-line the application entered by the dealer. The LUI may be used by lenders, for example, in the case of a communications outage on their in-house credit processing system, to manually process loan application review/approval. Further, with the LUI, lenders can view all the various system requests sent to them and all the referrals they may have made. They can view on-line the parameters of the relationships they have with dealers, and specific details about a particular dealer, e.g., number of loans in a particular time, etc. The lender user interface (LUI) also advantageously allows lenders to enter their own news onto the system themselves rather than through personnel at the system host, if they are announcing special incentives, or rate changes, for example. Lenders may also look at their invoices on-line from within the lender user interface (LUI).

According to another aspect of the invention, the contract validation feature provides contract information electronically to the lender so that the lender can verify the contract data before funding the loan, advantageously reducing the time for funding to be provided to a dealer, for example. Electronic funding automatically upon contract validation can advantageously be implemented. In this regard, disclosed is a computer based method of operating a credit application and routing system, the system including a central processor coupled to a communications medium for communicating with remote application entry and display devices, remote credit bureau terminal devices, and remote funding source terminal devices, the method comprising selectively receiving credit application data from a remote application entry and display

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device, selectively obtaining credit report data from at least one remote credit bureau terminal device, selectively forwarding the credit application data, and credit report data if appropriate, to at least one remote funding source terminal device, and selectively forwarding funding decision data from the at least one remote funding source terminal device to the respective remote application entry and display device, wherein if the funding decision data is approval of the credit application, selectively forwarding purchase contract data from the remote application entry and display device to the central processor, verifying the purchase contract data in the central processor, forwarding the verified purchase contract data from the central processor to the at least one remote funding source terminal device, and forwarding an indication of purchase contract status from the at least one remote funding source terminal device to the respective remote application entry and display device.

According to another aspect of the invention, the graphical user interface (GUI), which is also commercially known as "CCWIN" or "Credit Connection for Windows" (Credit Connection is a trademark licensed to Credit Management Systems Incorporated (CMSI), all rights therein being reserved), advantageously provides the same functionality as the character based product. The GUI uses the concept of the "deal jacket" (a common term used by dealerships) providing tabs as a selection process. From any tab a dealer can move to another piece of information contained in the deal jacket. The GUI also uses many graphical representations, e.g., icons, for the selection of primary function, i.e., enter a new application, etc. Bank logos are advantageously used in the lender screen so that when a dealer is viewing decisions from each of the lenders, they see a representation of the lender logo. A car picture in the application overview screen is advantageously used to illustrate the collateral a customer may be purchasing. Color can be advantageously used to highlight certain information, e.g., derogatory credit bureau information. In this regard, disclosed is a method for use in a terminal including a visual display and a pointing device, to provide a graphical user interface for graphically depicting credit application operations, the method comprising: displaying on the visual display a graphical depiction of a deal jacket, including graphical depictions of folder tabs, and displaying on the visual display at least one icon for the selection of at least one associated credit application function. According

to another aspect of the invention, the at least one credit application function associated with the at least one icon includes one of: enter a new credit application, pull a credit bureau report, select a lender, and numerous other functions. According to another aspect of the invention, the displaying of the graphical depiction of a deal jacket includes displaying at least one of the following folder tabs: public records, applicant, co-applicant, collateral, comments, overview, lenders, credit summary, trades, and bureau data. The lender to lender interface, described above, can be implemented as a "lender link" where a lender user can easily and conveniently link through the GUI with another lender to forward an application.

According to another aspect of the invention, the enhanced mega-dealer reporting allows a large dealership group to view reports from a dealership or group level through the GUI. The dealer may select to see reports on an individual store, or all of their stores at one time. This allows large dealerships to better manage relationships with lenders from a corporate level, not only a store level. In this regard, disclosed is a computer based method of operating a credit application and routing system, the system including a central processor coupled to a communications medium for communicating with remote application entry and display devices, remote credit bureau terminal devices, and remote funding source terminal devices, wherein the system processes credit applications for a dealer having a plurality of dealerships located at different locations, the method comprising aggregating data from each of the plurality of dealerships, and providing the dealer with consolidated reports using the aggregated data. In the enhanced system, the reports and presentations have been modified over those of the previously disclosed system in accordance with the GUI CCWIN enhancements.

According to another aspect of the invention, the interface with dealership web sites advantageously provides a closed loop credit decision process for a consumer on the Internet. In the previous system it was contemplated that dealers and other users could route their messages to and from the system through the Internet, or any other data transfer medium. According to this enhancement, a dealer with a web site can link the consumer credit application processing of the system to the web site so that consumers can browse for a purchase item, and advantageously fill out a credit

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application at the same time. In this regard, disclosed is a computer based method of operating a credit application and routing system, the system including a central processor coupled to a communications medium for communicating with remote application entry and display devices, remote credit bureau terminal devices, and remote funding source terminal devices, wherein the system processes credit applications for a dealer having a web site, the method comprising receiving credit application data from a consumer through the dealer web site, selectively obtaining credit report data from at least one remote credit bureau terminal device, selectively forwarding the credit application data, and credit report data if appropriate, to at least one remote funding source terminal device, and selectively forwarding funding decision data from the at least one remote funding source terminal device to consumer at the dealer web site. According to another aspect of the invention, a copy of the funding decision data is sent to the dealer directly. According to a further aspect of the invention, the sending a copy of the funding decision data to the dealer directly comprises at least one of: faxing the data to the dealer and providing the data to the dealer on-line. According to another aspect of the invention, when a user shops for an automobile and looks up a vehicle on a dealer's web site, the system provides the dealer with the name and phone number of the user so that the dealer can follow up on the lead.

According to another aspect of the invention, the in-house (e.g., ADP Elite) interface advantageously allows elimination of the need for duplicate data entry at sites where such an in-house finance and insurance (F&I) software system is already installed. Dealers may originate an application on their software and load it to the system Host of the present invention. Dealers can simply "toggle" from their in-house F&I system to the inventive system of the present invention (Credit Connection) where the application is then available to the user. In this regard, disclosed is a computer based method of operating a credit application and routing system, the system including a central processor coupled to a communications medium for communicating with remote application entry and display devices, remote credit bureau terminal devices, and remote funding source terminal devices, wherein the inventive system processes credit applications for a dealer having an in-house finance and insurance

system, the method comprising receiving credit application data from remote application entry and display devices of the dealer in-house finance and insurance system, selectively obtaining credit report data from at least one remote credit bureau terminal device, selectively forwarding the credit application data, and credit report data if appropriate, to at least one remote funding source terminal device, and selectively forwarding funding decision data from the at least one remote funding source terminal device to the respective remote application entry and display device of the dealer in-house finance and insurance system.

According to another aspect of the invention, the enhanced manipulation of debt ratio feature disclosed in the prior co-pending application advantageously allows dealers to modify consumer data to work with the consumers debt, car price, loan amount, etc., to help the consumer qualify for a loan, in connection with the GUI CCWIN system enhancements. This aspect provides the dealers with the capability of changing a payment amount, for example, to determine what the new debt ratio will be, doing a "what-if" analysis. This can advantageously aid the consumer in getting the proper loan, and the dealer in making the sale. In this regard, disclosed is a method of analyzing credit application and credit bureau report information, including performing debt ratio computations. The GUI enhancements make for an easier and more aesthetically pleasing operation.

According to another aspect of the invention, the automatic update feature advantageously ensures the dealers are using the most up-to-date versions of the system software resident on their local computers. This feature relates to installations where system software is resident on the remote device, for example, the CCWIN version of the system. According to this aspect of the invention, each time a dealer using the Windows product (CCWIN) connects to the host by means of the Internet, for example, the host checks to make sure that the dealer is using the most recent version of the Credit Connection for Windows software. If not, the host automatically sends a program to the dealer through the Internet to automatically update their resident software. In this regard, disclosed is a method of updating user software in a computer based method of operating a credit application and routing system, the system including a central processor coupled to a communications medium for communicating

with remote application entry and display devices, remote credit bureau terminal devices, and remote funding source terminal devices, the method comprising checking the software of a user when the user logs in to the system and if the user software is not the most recent version, automatically forwarding data to use in updating the user software. The software can optionally be automatically updated while the user is on-line, or alternately, the user may opt to update the software at a later time.

According to another aspect of the invention, the gateway CPU at a lender's site is connected to the Credit Connection host by a telecommunications line, e.g., Sprint. Data passes from the host through the line to the gateway CPU and is processed by the software to be converted into a format which the lender credit processing system recognizes, and then transported to the lender credit processing system. It also receives data back from the lender credit processing system, converts it into a format that Credit Connection recognizes, and sends it back to the Credit Connection host. In this regard, disclosed is a credit application and routing system comprising a central processor having and executing a program and further comprising at least one data input terminal for selectively receiving credit application data from respective applicants at remote locations and forwarding the data to the central processor over a communications medium, at least one funding source front end processor for receiving the credit application data from the central processor over a communications medium and sending funding decision data to the central processor. According to a further aspect of the invention, the front end processor has and executes a program to convert the credit application data received into a format for use by a funding source credit processing system and to convert the funding decision data into a format for use by the central processor.

Brief Description Of The Drawings

The above and other objects, advantages and features of the invention and the disclosed embodiments will become apparent from the following detailed description taken with the drawings in which:

Fig. 1 is an illustration of the functional components of a system according to an exemplary embodiment of the present invention.

Figs. 2A to 2N are exemplary graphical user interface deal jacket folder screens including exemplary icons according to an exemplary embodiment of the invention.

Figs. 3A to 3K are exemplary graphical user interface data entry screens according to an exemplary embodiment of the invention.

5 Figs. 4A to 4F are exemplary graphical user interface setup and information screens according to an exemplary embodiment of the invention.

Figs. 5A to 5C are additional exemplary graphical user interface screens according to an exemplary embodiment of the invention.

10 Fig. 6 is an exemplary graphical user interface pending decision list screen according to an exemplary embodiment of the invention.

Fig. 7 illustrates an exemplary series of icons forming an animation sequence in a graphical user interface embodiment of the invention.

Detailed Description Of The Preferred Embodiments

15 The invention will now be described in more detail by way of example with reference to the embodiments shown in the accompanying figures. It should be kept in mind that the following described embodiments are only presented by way of example and should not be construed as limiting the inventive concept to any particular physical configuration.

20 With reference to Fig. 1, the third party fax connection, or simply "Fax Connection," aspect of the invention will now be described. The Fig. shows that the host 102 is connected to various users, the third party vendor 104, the dealer 106, the lender 108 and the credit bureaus 110, through a communications medium 112. This medium 112 could include leased lines, telephone lines, local and wide area networks, 25 the Internet, etc., as would be apparent to one skilled in the art, so long as the medium can support the volume and speed of data transmission traffic to meet design requirements.

30 However, there may be dealers who do not have the capability, personnel, or time to enter the application data directly into the Credit Connection system, or indirectly through an in-house finance and insurance (F&I) system. For these dealers,

the fax connection provides an alternative so that the benefits of electronic processing can be obtained.

The fax connection aspect of the invention provides an interface between the Credit Connection system host 102 and a third party vendor 104 (such as Global Fax) which allows a credit originator 106 (dealer) to fax an application to the third party vendor 104 for entry of the data into the Credit Connection system and transmission to the host 102. The fax devices are shown connected by a separate medium, however, this could actually be the same communications medium 112 normally used by the system. The application is manually keyed in by the third party vendor 104 and transmitted electronically to the Credit Connection host 102, for routing to a lender or lenders 108. Credit bureaus 110 are accessible by the host 102 if credit bureau reports are to be pulled. This third party vendor 104 aspect of the invention eliminates any requirement for data entry on the part of both the credit originator, e.g., a dealer 106 with only manual application entry and faxing capabilities and/or personnel, for example, and the lender 108 who is connected to the Credit Connection system, but would otherwise have to deal with faxed applications manually from this dealer 106.

This Fax Connection aspect of the invention therefore provides the advantageous capability for the Credit Connection system to route applications from a third party data entry source 104 through the Credit Connection system to lenders 108. By having one pipeline to the Credit Connection system, lenders 108 are able to receive applications from multiple and varied sources electronically. Besides using third party vendors 104, the Credit Connection host system site may also be provided with the capability through graphical user interface personal computers (GUI PC's), terminals, or the like, and data entry personnel (not shown) to load an application faxed to the host site directly from a dealer 106, into the Credit Connection system and thereby to send the application to a lender 108 on behalf of the dealer 106.

One simple example of a use of this third party faxing capability will now be described. A dealer (Smith Motors) faxes an application to Citizens Bank. However, the faxed application is actually received by a third party vendor (e.g., Fax Pro) and entered into the Credit Connection system. The application data entered is then sent electronically to Citizens Bank through the Credit Connection system. The Credit

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Connection system, through the third party vendor, is thereby able to electronically process and route the application, originating with Smith Motors, and the decision from Citizens Bank, even though Smith Motors submitted a faxed application originally. Alternately, Smith Motors could fax the application to the Credit Connection host site
5 directly for entry by personnel at the site, and processing in the system.

Super Store integration with kiosks is provided and will now be described. This integration aspect of the present invention allows a consumer to enter an application at a kiosk located at a Super Store (or other location). The application is then transmitted electronically to the Credit Connection host.

Integration of the Credit Connection system to front end Kiosks of Super Stores, e.g., Drivers Mart and Carmax, advantageously allows for the Super Stores to share application and decisioning data with the Credit Connection system. This aspect of the invention provides data conversion between the kiosk system and the Credit Connection host system requirements. In one embodiment, a dynamic link library (.dll) program is used to poll data from the Credit Connection system on a timed basis to populate the kiosk. Other methods would be apparent to one skilled in the art and are dependent on the type of kiosk system being operated.

The just described kiosk integration assumes that the kiosks have some sort of data entry terminal which is used by the consumer to enter application data. However,
20 in some instances, the kiosk may include a telephone line to a third party vendor who takes the application data orally from the kiosk user over the telephone lines and enters the data into the Credit Connection system through a terminal device.

Also contemplated for kiosks is a variation of the above, in which the kiosk may use a touch screen device to interactively respond to a third party vendor providing
25 prompts to the consumer manually or automatically.

Lender-to-lender capability is provided. Co-pending patent application serial number 08/526,776 describes an inventive process according to one embodiment where a credit application is entered by an automobile dealer, for example, into a terminal at the dealership, and is sent through the Credit Connection system to various
30 lenders ("initial lenders") for decisions. In the above-referenced embodiment of the invention described in the co-pending application, the initial lender has the option, after
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making a decision, to send that decision back through the Credit Connection system to the dealer. If the decision is a decline, i.e., application rejected, the dealer can decide then, or may have decided in advance, that upon decline, the application should be sent to another lender. If the decision was that the application was rejected by the initial lender selected, then a subsequent lender with different criteria may approve the loan, thus providing a better chance that the consumer will be able to make the purchase and the dealer close the deal.

As described more fully below, a direct lender-to-lender process is provided. In this process, if an initial lender decides not to approve an application, the initial lender itself can opt to automatically forward the application through the Credit Connection system to another lender, a "secondary lender," with whom the initial lender has a relationship. In other words, the initial lender now has the option wherein rather than just send the application directly back to the dealer as not approved (rejected), it can be forwarded to another (secondary) lender. Upon the secondary lender issuing a decision, one or both of the lender responses are then sent back to the dealer. This entire process typically takes place in a matter of a few minutes or less.

An example of such a relationship between lenders is where one lender is a so-called "prime" lender and the other lender is a so-called "sub-prime" lender. A prime lender would have one set of lending criteria, while the sub-prime lender would make loans of a different grade, and thus employ a different set of lending criteria. If the prime lender decided not to approve a loan, it could send the application directly to the sub-prime lender, which might be more likely to approve the loan since its lending standards would not be as strict as those of the prime lender.

Some of the advantages of providing a lender-to-lender capability are now described. The lender-to-lender capability provides various advantages to each of the parties involved, the applicant, the dealer, the secondary lender, and the initial lender.

The applicant naturally wants his or her application approved, and as quickly as possible. With the lender-to-lender capability, there is a greater likelihood that the application will be approved, since an application rejected by an initial lender will also be sent to a secondary lender which applies different lending criteria to the credit application. Even lenders that make loans of the same grade sometimes use different

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criteria to evaluate loan applications, which is why a dealer often sends the loan application to more than one lender in the first place. The applicant is also likely to receive his decision more quickly because the application is automatically sent by the initial lender to the secondary lender upon the initial lender's decision to decline the application, and thus, the dealer is not required to resubmit the application upon
5 receiving a decline response from the initial lender. In other words, the secondary lender receives the application directly from the initial lender through the Credit Connection system, and because of the elimination of the transmissions back to the dealer, the entire decisioning process can be completed more quickly. From the dealer's perspective this process is also more efficient.

The dealer also benefits from the lender-to-lender process, because each application has more of a chance of being approved, for the reasons stated above. The dealer's interest is in securing financing for the applicant in the fewest number of steps, and as quickly as possible, so that the dealer can sell an automobile. Therefore, any process which increases the applicant's chances of obtaining a loan benefits the dealer since the applicant cannot purchase an automobile without financing. The lender-to-lender capability of Credit Connection accomplishes this by getting the application to secondary lenders which have been targeted by the initial lenders as more likely to approve the application. The dealer's efforts are also minimized since it
20 does not have to resubmit applications which are denied by the initial lenders.

The secondary lenders benefit by receiving more applications, and thus more revenue generating opportunities. The more credit applications that a lender receives, the more opportunities it has to make loans. Therefore, secondary lenders will benefit from Credit Connection's lender-to-lender capability since they will receive applications
25 from the initial lenders which they might not have received directly from the dealers. In other words, the secondary lenders do not have to establish arrangements with certain dealers to receive applications from them because they can receive the applications indirectly, through the initial lenders.

Similarly, the initial lenders benefit because they receive more applications than
30 they might otherwise receive. A dealer may be more willing to send an application to a lender, despite the fact that the lender may be no more likely than another lender to
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approve the application itself, because it knows that if the lender declines the loan, it will send the application to a secondary lender who has more of a chance of approving the loan. The initial lender may also have an additional incentive to send the application to a secondary lender(s) because the initial lender can be expected to have established an arrangement which entitles it to receive fees from secondary lenders to which it sends applications.

A lender user interface (LUI) for decisioning is also provided according to an embodiment of the invention. This LUI allows a lender to receive an application through the Credit Connection service, bypassing its own credit processing system, and manually decision the application. The lender user interface serves a number of purposes. One is to provide the lenders the capability of manually responding to dealer requests electronically. Lenders may also use this in the case of a communications outage on their in-house processing system. Lenders can view all the Credit Connection system requests sent to them, all referrals they may have made with the lender to lender aspect just described above. They also may view on-line the applications entered by any dealer, the relationships they have with dealers, and specific details about any dealer. The second purpose of the LUI is to allow lenders to enter their own news onto the system, such as news relating to their loan and lease products. Lenders may also look at their invoices on-line from within the LUI.

A contract validation process is also provided according to an embodiment of the invention. Contract validation allows a dealer, once the customer has agreed on a car, pricing, and loan amount (as approved by a lender), to forward the contract information electronically to the lender so that the lender can verify the contract data, e.g., the terms such as dollar amounts, before funding the loan.

Currently, dealers send hard copies of the contract information to the lenders for validation, by mail or fax for example, so the process generally takes at least a couple of days. If the dealer wants to sell the car before receiving the funds, it can "spot" the vehicle, which means that it lets the customer leave with the vehicle and hopes that the contract information is validated by the lender and not rejected for some reason. If rejected, revision and re-execution of the contract may be required, which of course is inefficient for all parties involved.

Therefore, contract validation allows for a dealer to transmit an "electronic contract" to a lender. If a relationship exists between the lender and dealer, the dealer may load contract data directly to the lender from the funding screen of the Credit Connection system: The data is first checked from within the Credit Connection system to insure that the math is correct and required fields are complete. Upon loading into the lender system, the data is checked to see if it complies with the lender policies. The lender can then return one of three responses: Rejected, Approved, and Pending. Rejected means that the contract was not loaded into the lenders system. Approved means that the contract was accepted and there were no problems. Pending means that the contract was accepted but is still undergoing review. The user of the Credit Connection system, viewing a credit application status screen, for example, sees either "funded" for approved applications/contracts, or the status stays "booked" for rejected/pending applications/contracts. It can be appreciated from the business perspective that this contract validation feature can speed up the funding process for the dealership.

As previously described, the Credit Connection system will support lender specific contract data screens, and the system also has a generic screen to capture primary data for reporting purposes. The basic credit application format is the standard CBA (Consumer Bankers Association) application, however the application can be a full application, or a "quick" application, that is, an abbreviated application where a dealer enters just enough information to call a credit bureau. In contract validation, the dealer can be presented with lender specific contract information screens using the system according to the invention. In contract validation, the system will check the contract for incomplete fields and math errors, and then forward the contract to the associated lender. If the contract is approved, the system will send the dealer an indication of "funded" so that the dealer can confidently give the vehicle to the consumer, as just described.

Additional optional dealer functionality may be provided through the Credit Connection system. For example, links to third party vendors can be used to obtain vehicle registration at the relevant division of motor vehicles (DMV). In the case of a previously owned automobile, vehicle history could be obtained through the system.

This could also be used to check trade-in vehicles, as can be imagined. Insurance and warranty functionality can also be provided through the Credit Connection system, through interfaces to the appropriate systems.

A Graphical User Interface (GUI) is provided in the enhanced Credit Connection system windows version (CCWIN). With the GUI, car pictures and bank logos, for example, may be displayed. A "folder metaphor" is also provided. For example, typically dealers keep files relating to their customers in a number of different physical folders containing different documents and information about the particular customer. These folders are stored in file cabinets requiring a great deal of physical space, as well as requiring tracking and filing systems and personnel. The GUI version displays a graphical depiction of a set of "folders" representing data stored on the system. The user points at a displayed folder tab to open-up the appropriate folder, allowing the user to view and modify the information electronically stored therein. This provides immediate access to the desired information from a central location without the costs and inefficiencies of physical paper folders.

The GUI version is also known as CCWIN which stands for Credit Connection for Windows (all rights reserved). The GUI version (CCWIN) functionality was modeled after the character product and, with some exceptions, the resultant functionality is the same as the character product, which was previously described in the co-pending related application. The GUI differs from the character version in that it provides icons for various functions, as will be described in detail below. The GUI version also uses the folder metaphor for processing an application. The metaphor implements electronically the concept of the "deal jacket" with folders and tabs. The deal jacket is a common term used by automobile dealerships for the physical folder containing all the relevant paperwork, forms, etc. Using the deal jacket metaphor, Credit Connection for Windows uses tabs which the user can point and click on as an information selection process. From any tab, a dealer can move to another piece of information contained in the deal jacket.

Fig. 2A illustrates an exemplary screen showing the deal jacket concept. In Fig. 2A, the "Overview" tab is selected and a screen of overview information is displayed. The other tabs visible include "Lenders", "Credit Summ" (for credit summary), "Trades",

Bur Data" (for credit bureau data), "Public Recs" (for public records), and "Applicant" in the first row shown in Fig. 2A. In the second row shown in Fig. 2A, tabs visible include "CoApplicant", "Collateral", "Comments", "Business", "Credit", "CoAp Credit" (for co-applicant credit), and "Finance." The screen shown in Fig. 2A is for illustrative purposes only, and the personal data and dates displayed are purely fictional. Any resemblance to any person living or dead is purely unintentional and coincidental. One skilled in the art would recognize that other data could also be display, and that the data could be displayed in a variety of ways, within the spirit of the invention.

As illustrated, the selected tab word "Overview" is highlighted and the overview tab/folder is displayed "on top" of the set of folders making up the deal jacket. The GUI version uses many graphical representations, e.g., icons, which will now be covered in more detail below, for the selections of primary functions, etc., e.g., enter a new application. The overview screen gives a quick picture of all the components of a given deal. Displayed is applicant information, basic vehicle data, and a snapshot of the customer credit history with possible problems highlighted.

Fig. 2A shows some icons buttons just below the top of the screen. The icon on the far left, which looks like a folder with a writing implement extending up at an angle therefrom, stands for the function of creating a new application. If selected by "depressing" the icon button, i.e., placing the cursor on the icon button and clicking, a new application screen would be displayed, as will be described in more detail below.

The next icon moving to the right in Fig. 2A, represents an application list, and if selected, operates to display a screen with a list of applications, as will be described in more detail below.

The next icon to the right, which appears as an open folder, if selected would perform the function of opening the deal jacket. In Fig. 2A, this button is "depressed" and the deal jacket is displayed.

The next icon button over, which looks like a folder with a lightening bolt across it, stands for quick application, and if selected, would open a quick application screen. A quick application is described in the related co-pending application, and an example of a GUI quick application screen will be described in more detail later herein.

The next icon button over to the right looks like a vehicle with a price tag attached, and if depressed, would display automobile value guide information.

The next icon button over to the right looks like a newspaper and if selected would display news.

5 A fictional time and date "12:25 PM 4/21/97" is shown displayed at the bottom of the screen for illustrative purposes only, and in the actual system would display the current time and date to keep the user aware of the current time and date. Next to the date is a button with an arrow and a question mark. In use, this button would be clicked and then the cursor moved to an area of the screen where the user would click again,
10 and as a result, additional information, e.g., detail or help information, about the selected area of the screen would be displayed.

Fig. 2B illustrates the lender screen selected by clicking on the "Lenders" tab, according to an exemplary embodiment of the invention. Along the right edge of the screen are six exemplary function buttons which may be selected. In Fig. 2B, the
15 "Submit to Lender(s)" button is selected, the underlined "S" indicating the control key letter alternative for selecting this function.

Fig. 2C shows the screen displayed when the "Credit Summ" tab is selected, according to an exemplary embodiment of the invention. The screen is a summary of credit bureau information associated with the applicant. Color highlighting is used to emphasize "derogatory" information at the bottom of the screen, such as "Past
20 Delinquency." A variety of colors can be used to provide a color-coded snapshot of the customer credit history. This credit bureau summary screen gives a more in-depth picture of an applicant's credit status. Major and minor derogatory problems are color-coded for highlighting. All credit bureaus are displayed in a common format,
25 automatically analyzing information like trade history, bureau score, and debt ratio. Once retrieved, the credit information is stored for later access so that there is no chance of losing printed credit reports or paying to retrieve the credit report from the bureau a second time. Further, bureau information is generally retrieved through the Credit Connection system in a matter of seconds due to the high-speed lines used to
30 access the credit bureaus.

Fig. 2D shows the screen displayed when the "Trades" tab is selected, according to an exemplary embodiment of the invention. The screen presented is a tabular list of "Unique Trades From CBI." CBI is a credit bureau, and the credit bureau report information is formatted on the screen in a user friendly fashion for evaluation with the consumer. Again, the screen is representative and not meant to be limiting of the invention defined in the claims, in that numerous variations are possible within the spirit of the invention.

Fig. 2E shows the screen displayed when the "Bur Data" tab is selected, according to an exemplary embodiment of the invention. The raw credit report format provided by the credit bureau, the "Bureau Data," is displayed in the window, and at the bottom, text searching through the credit report is implemented with the "Search For...." Box and the "Find" button.

Fig. 2F shows the screen displayed when the "Public Recs" (public records) tab is selected, according to an exemplary embodiment of the invention. These public records relate to tax liens, and the like.

Fig. 2G shows the screen displayed when the "Applicant" tab is selected, according to an exemplary embodiment of the invention. This tab selects a screen of applicant data, such as is shown.

Fig. 2H shows the screen displayed when the "CoApplicant" tab is selected, according to an exemplary embodiment of the invention. This tab selects a screen of co-applicant data, such as is shown. If there is no co-applicant connected with the deal in question, the "CoApplicant" tab would not be displayed.

Fig. 2I shows the screen displayed when the "Collateral" tab is selected, according to an exemplary embodiment of the invention. This screen displays collateral connected with the deal.

Fig. 2J shows the screen displayed when the "Comments" tab is selected, according to an exemplary embodiment of the invention. In the displayed window in this figure, there are no comments displayed. However, if there were additional comments connected with the deal, they would be viewable here.

Fig. 2K shows the screen displayed when the "Business" tab is selected, according to an exemplary embodiment of the invention. This tab would only be

displayed on the deal jacket if the associated application is a business application. The screen displayed when the tab is selected would have various business related information presented in the format shown.

Fig. 2L shows the screen displayed when the "Credit" tab is selected, according to an exemplary embodiment of the invention. Here credit information would be displayed associated with the deal.

Fig. 2M shows the screen displayed when the "CoAp Credit" (co-applicant credit) tab is selected, according to an exemplary embodiment of the invention. This tab would not be displayed if there were no co-applicant associated with the deal. The screen is similar to the screen displayed when the "Credit" tab is selected, except that it is for displaying the co-applicant credit information.

Fig. 2N shows the screen displayed when the "Finance" tab is selected, according to an exemplary embodiment of the invention. This screen shows the finance information associated with the deal in question.

Figs. 2A to 2N illustrate a representative deal jacket display on the GUI according to an embodiment of the invention. It should be remembered, however, that these figures and description are presented for illustrative purposes only.

With the GUI, bank logos can be used in the lender screen (see Fig. 2B), for example, so that when a dealer is viewing decisions from each of the lenders, they see a representation of the lender bank logo. The GUI may also use a car picture in the application overview screen (see Fig. 2A), for example, to illustrate the collateral a customer may be purchasing.

Further examples of the various screens provided in an exemplary embodiment of the invention are shown in Figs. 3A to 3K and will now be described.

Fig. 3A shows a quick application screen selected when the quick application icon button is depressed in accordance with an embodiment of the invention. On this screen is displayed fields to enter quick application data.

Fig. 3B shows an applicant entry screen selected when the create new application icon button is depressed (the applicant tab is shown selected) in accordance with an embodiment of the invention. On this screen is displayed a screen of fields for entering applicant information. At the top of the screen, some additional

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icon buttons beyond those already described are displayed, and these will be explained first.

The button on the far left is an arrow pointing to the left which, if depressed, would shift the line of icon buttons to the right so that any icon buttons to the left of those shown are shifted into view. A corresponding arrow is also provided on the far right to shift the icons in the opposite direction.

Next to the left pointing arrow is an icon button which looks like a master card being examined with a magnifying glass. This button selects a call credit bureau function from within the application being entered.

The icon next to the call credit bureau icon looks like the Federal Reserve building, and if selected, starts a send (the current application) to lender function.

The vehicle with price tag icon has already been described. To the right of that icon is a stop sign icon button which has the function of halting the current operation, i.e., the entry of the application data. Data already entered will be saved for future use.

The icon button that looks like a briefcase, when selected, would make the application a business application, and the related screens required for such an application would be available through tab selection.

The next icon button shows two people side by side and if selected, indicates the application is a joint application. If selected, applicant and co-applicant tabs/screens would be available for selection.

The next icon button indicates the application is for a lease, and the one to the right of that one indicates the application is for a loan. When one of these two icon buttons is depressed, the other is automatically un-depressed.

As mentioned, Fig. 3B shows an applicant screen for entry of applicant data in accordance with an embodiment of the invention. The "Loan" icon button is selected for entering loan application data. The additional tabs associated with data entry screens are also shown and these will now be described.

Fig. 3C shows an employment information entry screen selected when the "Employment" tab is selected in accordance with an embodiment of the invention. On this screen are displayed fields for entry of employment and income data.

Fig. 3D shows a collateral screen selected when the "Collateral" tab is selected in accordance with an embodiment of the invention. On this screen are displayed fields for entering collateral associated with the application.

Fig. 3E shows a finance entry screen selected when the "Finance" tab is selected in accordance with an embodiment of the invention. On this screen are displayed fields for entering financial data connected to the loan application.

Fig. 3F shows a credit information entry screen selected when the "Credit" tab is selected in accordance with an embodiment of the invention. On this screen are displayed fields for entry of credit information for the applicant applying for a loan.

Fig. 3G shows a comments entry screen selected when the "Comments" tabs is selected in accordance with an embodiment of the invention. On this screen is displayed a lined window in which to enter comments about the associated applicant/loan.

In Fig. 3H, the "Lease" icon button is shown depressed, and therefore, a lease tab is shown selected. The applicant, employment and collateral tabs/screens, as well as the credit and comments screens for a lease are the same as for a loan. When this tab is selected, a screen for lease information is displayed in accordance with an embodiment of the invention. On this screen are displayed fields for entering lease information. This essentially takes the place of the finance screen used with the loan application entry, described above.

Fig. 3I shows a co-applicant entry screen selected when the co-applicant icon button is depressed in accordance with an embodiment of the invention. On this screen are displayed fields for entry of co-applicant data. In Fig. 3I, the lease icon button is shown depressed, however, the co-applicant screen would be the same if the loan icon button were depressed. Near the top of the screen, on the left, a relationship

selection arrow (down-arrow) is provided allowing easy selection of the appropriate relationship, i.e., spouse, parent, child, grand-parent, etc.

Fig. 3J shows a co-applicant employment entry screen selected when the associated "Co-App Empl" tab is selected in accordance with an embodiment of the invention. On this screen are displayed fields for entering co-applicant employment data, if applicable.

Fig. 3K shows a co-applicant credit information entry screen selected when the associated "Co-App Cred" tab is selected in accordance with an embodiment of the invention. On this screen are displayed fields for applicable credit data entry.

A number of setup screens are used to setup information about a particular installation of the GUI system according to the invention, and some representative screens related to setup and other administrative matters are shown in Figs. 4A to 4F and will now be described.

Fig. 4A shows a dealer setup screen selected in accordance with an embodiment of the invention. On this screen is displayed deal setup information, including fields for first, second, and third lenders.

Fig. 4B shows a user setup screen selected in accordance with an embodiment of the invention. On this screen are displayed fields for entering users of the system.

Fig. 4C shows a billing information summary screen selected in accordance with an embodiment of the invention. On this screen is displayed a summary of the billing information for a particular dealer.

Fig. 4D shows a regular charges screen selected in accordance with an embodiment of the invention. On this screen is displayed information associated with charges in connection with use of the system.

Fig. 4E shows a discount information screen selected in accordance with an embodiment of the invention. On this screen is displayed information associated with discounted services in connection with use of the system.

Fig. 4F is a screen showing a display of a list of transactions for a current period.

As mentioned earlier, an icon button is available for sending a application to a lender. Fig. 5A shows a submit to lenders entry screen by which one or more lenders

from a list of all lenders can be selected. This selection would typically be made once at login, and not each time an application is submitted to the lender(s).

Fig. 5B illustrates a credit bureaus entry screen in which a bureau to call can be selected for the applicant/co-applicant or both.

Fig. 5C illustrates a news screen by which news can be entered into the system, displayed and edited news item by news item.

Fig. 6 illustrates a decision list screen in which pending decisions are listed. The list is fully searchable according to specified parameters (constraints).

As mentioned above, various icons and icon button are used with the GUI (CCWIN) system in order to select a desired function or display. The ornamental design of these icons is the subject of a number of co-pending design patent applications. Some icons are also used to indicate that an operation is taking place. For example, shown in Fig. 7 is a series of sixteen icons (A-P) forming an animation. In the animation, the two C's change shape and position in front of the lender icon (the Federal Reserve Bank) indicating that a lender is being contacted through the Credit Connection system. Other icon series are possible within the spirit of the invention.

Enhanced mega-dealer reporting is provided. Mega-dealers are dealers that have multiple dealerships. The system previously disclosed in the co-pending application can aggregate the data from all of the mega-dealer dealerships into consolidated reports, giving them statistics based on all their dealerships. This gives the capability for a large dealership group to view reports, for example, turnaround and lender lookup, from a dealership level or a group level, for example. The dealer may select to see reports on an individual store, or all of their stores at one time. This allows large dealerships to better manage relationships with lenders from a corporate level, not only a store level. The Credit Connection system is unique in the fact that it is the only service provider capable of producing reports at a multi-store level. In the enhanced system, these reports have been enhanced for better graphics, layout, format, display, and the like, in accordance with the GUI capabilities.

The so-called "AutoFinance" feature allows a user connected to a dealer web site 114 (see Fig. 1), e.g., an AutoConnect web site, to apply for a loan with any lender 108 which subscribes to the web site 114. With this AutoFinance web site feature, the

system is able to provide a closed loop credit decision process for a consumer at a web site 114 the Internet. This feature provides an application process where consumers apply for credit through the dealership web site 114 (e.g., AutoConnect) for financing for a vehicle. After filling out an application screen at the web site 114, the consumer is then provided a response electronically at the web site 114, and/or through e-mail, as to the disposition of their credit application. Should the decision not be returned immediately, AutoFinance has a "review status" page on the web site 114 where a consumer may enter a password to learn the disposition of their application.

From a processing perspective, the application from the web site 114 is routed through the Credit Connection system to a lender 108 with the information about the consumer along with information about the dealer web site 114 from where the consumer application originated. The application is loaded into the lender credit processing (decisioning) system, e.g., Credit Revue, which subsequently reaches a decision. The decision is then sent back to the consumer at the web site 114 with the proper disclosures. A decision is also sent to the dealer 106 about the consumer. This decision could be faxed to a dealer 106 or stored in the Credit Connection system host 102 as a lead from where the dealer 106 may view on-line data about the deal. The Credit Connection system will also generated a lead for the dealer 106 if the consumer decides to opt-out of the application process at any point before completion.

There are two types of leads: Incomplete (the consumer did not complete the application process) and Complete. Leads are provided when a user shops for an automobile through the web site 114, e.g., AutoConnect, and looks up a vehicle on a dealer web site. The system provides the dealer 106 with the name and phone number of the browser/user so that the dealer 106 can follow up on the lead. Of course, the dealer web site could have a link to a lender web site at which the credit application could be entered into the Credit Connection system.

Integration of the Credit Connection system with in-house dealer Finance and Insurance (F&I) systems, e.g., from ADP or UCS, is also provided according to an embodiment of the invention. Elite is the name of ADP's F&I software that is used within a number of automobile dealerships. To eliminate the need for duplicate data entry in each system, a particular interface and functionality was developed that allows

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the dealers 106 to originate an application on their in-house software and load it to the Credit Connection system host 102. Dealers 106 can then "toggle" over to the Credit Connection system where the Credit Connection application screen is then available to the user. In the case of Elite users, technically the application is routed from within the dealership to ADP's mainframe in Ann Arbor MI, however this path is not illustrated for the sake of simplicity.

The ADP mainframe then communicates through an interfacing system (a gateway computer) to the Credit Connection system host 102. In the process, the information from ADP's system is converted into a form useable by Credit Connection. The integration provides a stream of data from ADP to the Credit Connection system. A two-way sharing of data is also possible, that is, from Credit Connection to the ADP system, through a reverse conversion process, as would be apparent to one skilled in the art. (The same data sharing would apply to other in-house F&I software systems.)

The implementation provides for the loading of application data, and can accommodate other data as well. The integration works with both the CCWIN and the character based Credit Connection systems.

The Credit Connection system provides the ability to perform what-if calculations, including a manipulation of a consumer's debt ratio. Manipulation of debt ratio allows dealers to modify consumer data to "work with" consumer debt, car price, loan amount, etc., to help the consumer qualify for a loan. The Credit Connection system has the ability to identify all the unique trades associated with a credit bureau report (see trades folder of Fig. 2D). In the screens that present individual trade lines are displayed debt ratio calculations, providing the dealers the capability to change a current payment amount ("Change Curr Pmt") to determine what the new debt ratio will be. Dealers are not actually manipulating bureau data and this is just a "what-if" scenario. Other similar what-if manipulations of consumer data are possible within the spirit and scope of the invention, as would be readily apparent to one skilled in the art. For example, the loan to value ratio on the vehicle being sold can be checked against different lenders' criteria and policies.

Automatic software updating is provided in the CCWIN version. Each time a dealer, for example, using the system connects to the host, by means of the Internet,

It will be apparent to one of ordinary skill in the art that the manner of making and using the claimed invention has been adequately disclosed in the above-written description of the preferred embodiments taken together with the drawings.

5 It will be understood that the above description of the preferred embodiments of the present invention is susceptible to various modifications, changes, and adaptations, and the same are intended to be comprehended within the meaning and range of equivalents of the appended claims.

The present invention has been described with reference to auto dealers, however as would be readily appreciated by one skilled in the art, the invention is applicable to non-automotive customers.